Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS		JUN	06	EPFULL enhanced with 260,000 English abstracts
NEWS	3			KOREAPAT updated with 41,000 documents
NEWS	4	JUN		USPATFULL and USPAT2 updated with 11-character
112110	•	0 011		patent numbers for U.S. applications
NEWS	5	JUN	19	CAS REGISTRY includes selected substances from web-based collections
NEWS	6	JUN	25	CA/CAplus and USPAT databases updated with IPC
	-			reclassification data
NEWS	7	JUN	30	AEROSPACE enhanced with more than 1 million U.S.
				patent records
NEWS	8	JUN	30	EMBASE, EMBAL, and LEMBASE updated with additional
				options to display authors and affiliated
				organizations
NEWS	9	JUN	30	STN on the Web enhanced with new STN AnaVist
				Assistant and BLAST plug-in
NEWS		JUN		STN AnaVist enhanced with database content from EPFULL
NEWS		JUL		CA/CAplus patent coverage enhanced
NEWS	12	JUL	28	EPFULL enhanced with additional legal status
				information from the epoline Register
NEWS		JUL		IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS		JUL		STN Viewer performance improved
NEWS		AUG		INPADOCDB and INPAFAMDB coverage enhanced
NEWS	16	AUG	13	CA/CAplus enhanced with printed Chemical Abstracts
				page images from 1967-1998
NEWS		AUG		CAOLD to be discontinued on December 31, 2008
NEWS		AUG		CAplus currency for Korean patents enhanced
NEWS	19	AUG	27	CAS definition of basic patents expanded to ensure
				comprehensive access to substance and sequence
				information
NEWS	20	SEP	18	Support for STN Express, Versions 6.01 and earlier,
				to be discontinued
NEWS	21	SEP	25	CA/CAplus current-awareness alert options enhanced
				to accommodate supplemental CAS indexing of
				exemplified prophetic substances
NEWS	22	SEP	26	WPIDS, WPINDEX, and WPIX coverage of Chinese and
				and Korean patents enhanced
NEWS		SEP		IFICLS enhanced with new super search field
NEWS	24	SEP	29	EMBASE and EMBAL enhanced with new search and
				display fields
NEWS	25	SEP	30	CAS patent coverage enhanced to include exemplified

prophetic substances identified in new Japanese-

language patents

NEWS 26 OCT 07 EPFULL enhanced with full implementation of EPC2000 NEWS 27 OCT 07 Multiple databases enhanced for more flexible patent number searching

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS TPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 16:12:25 ON 15 OCT 2008

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File..

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE 0.21

TOTAL. ENTRY SESSION 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:12:36 ON 15 OCT 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 OCT 2008 HIGHEST RN 1061458-09-0 DICTIONARY FILE UPDATES: 14 OCT 2008 HIGHEST RN 1061458-09-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10550483.str



chain nodes:
10 11 13
ring nodes:
1 2 3 4 5 6 7
chain bonds:
1-10 5-13 6-11
ring bonds:
1-2 1-5 2-3 3-4 3-6 4-5 4-7 6-7
exact/norm bonds:
1-5 1-10 2-3 3-4 3-6 4-5 4-7 5-13 6-7 6-11
exact bonds:
1-2 isolated ring systems:
containing 1:

G1:Ph,Cy,Hy

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 10:CLASS 11:CLASS 13:CLASS

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS

L1



G1 Ph,Cv,Hv

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:12:54 FILE 'REGISTRY' 102 TO ITERATE SAMPLE SCREEN SEARCH COMPLETED -

100.0% PROCESSED

4 ANSWERS

102 ITERATIONS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE** PROJECTED ITERATIONS:

PROJECTED ANSWERS:

1435 TO 2645 4 TO 200

4 SEA SSS SAM L1

=> s 11 sss full

FULL SEARCH INITIATED 16:13:00 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1871 TO ITERATE

100.0% PROCESSED 1871 ITERATIONS

56 ANSWERS

178.36

SEARCH TIME: 00.00.01

L3 56 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 178.57

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 16:13:05 ON 15 OCT 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 15 Oct 2008 VOL 149 ISS 16 FILE LAST UPDATED: 14 Oct 2008 (20081014/ED)

 ${
m HCAplus}$ now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 L4 3 L3

=> d 14 ibib abs hitstr tot

L4 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:615194 HCAPLUS

DOCUMENT NUMBER: 148:554103

TITLE: Pyrrolo[1,2-a]imidazoledione effective in the treatment of peripheral neurotoxicity induced by

chemotherapeutic agents

INVENTOR(S): Farina, Carlo; Ghelardini, Carla; Petrillo, Paola

PATENT ASSIGNEE(S): Brane Discovery S.r.l., Italy

SOURCE: PCT Int. Appl., 27pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D	DATE			APPL	ICAT:	ION :	NO.		D	ATE		
						-	20080522											
WO	2008	0589	88		A1				WO 2007-EP62323						20071114			
	₩:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS.	IT.	LT.	LU.	LV.	MC.	MT.	NL.	PL.	PT.	RO.	SE.	SI.	SK.	TR.	BF.	

BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1925304 20080528 A1

EP 2006-124142 20061115 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,

BA, HR, MK, RS

EP 2006-124142 PRIORITY APPLN. INFO.:

The use of compound 1-(4-methylphenyl)dihydro-1H-pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione (I) in treating and/or preventing chemotherapy-induced peripheral neurotoxicity (CIPN) is described. The invention includes pharmaceutical compns. Wherein the compound I is present in a mixture with anticancer agents. An improved anticancer treatment with reduced CIPN-related side effects is also provided. Thus, racemic I (NiK-13317) was prepared by reaction of dihydro-1H-pyrrolo[1,2-a]imidazole-2,5(3H,6H)dione with 1-iodo-4-methylbenzene. Neuroprotective effects of NiK-13317 were observed in a rat model of peripheral neuropathy induced by vincristine, paclitaxel and oxaliplatin.

1020410-89-2P, NiK 16140

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(NiK 16140; preparation and cytoprotective activity of pyrroloimidazoledione derivative against antitumor agent-induced peripheral neurotoxicity) 1020410-89-2 HCAPLUS

1H-Pvrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-, (7aS) - (CA INDEX NAME)

Absolute stereochemistry.

770730-86-4P 1020410-90-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and cytoprotective activity of pyrroloimidazoledione derivative against antitumor agent-induced peripheral neurotoxicity)

770730-86-4 HCAPLUS RN

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-(CA INDEX NAME)

CN

RN 1020410-90-5 HCAPLUS

1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-, (7aR)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:413910 HCAPLUS

DOCUMENT NUMBER: 148:462516

TITLE: Synthesis and biological evaluation of novel

dimiracetam derivatives useful for the treatment of

neuropathic pain
AUTHOR(S): Farina, Carlo; Gagliardi, Stefania; Ghelardini, Carla;

Martinelli, Marisa; Norcini, Monica; Parini, Carlo;

Petrillo, Paola; Ronzoni, Silvano
CORPORATE SOURCE: Brane Discovery, Gerenzano, Varese, 21040, Italy

SOURCE: Bioorganic & Medicinal Chemistry (2008), 16(6),

3224-3232

CODEN: BMECEP: ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:462516

GI

Ι

AB Chemical modifications of dimiracetam (I), a bicyclic analog of the nootropic drug piracetam, afforded a small set of novel derivs. that were investigated in in vivo models of neuropathic pain. Compds. 5, 7 and 8 displayed a very promising antihyperalgesic profile in rat models of neuropathic pain induced by both chronic constriction injury of the sciatic nerve and streptozotocin. The compds. completely reverted the reduction of pain threshold evaluated by the paw pressure test. Importantly these derivs, did not induce any behavioral impairment as evaluated by the rotarod test. These results suggest that compds. 5, 7 and 8 might represent novel and well-tolerated therapeutic agents for the relief of neuropathic pain.

```
ΙT
    770730-81-9P 770730-82-0P 770730-85-3P
    770730-86-4P 770730-87-5P 770730-88-6P
    770730-89-7P 770730-90-0P 770730-91-1P
    770730-92-2P 770730-93-3P 770730-94-4P
    770730-95-5P 770730-96-6P 770730-97-7P
    770730-98-8P 770730-99-9P 770731-00-5P
    770731-02-7P 770731-03-8P 770731-07-2P
    770731-08-3P 770731-12-9P 770731-13-0P
    770731-14-1P 770731-15-2P 770731-16-3P
    770731-17-4P 770731-18-5P 770731-19-6P
    770731-23-2P 770731-24-3P 1020410-82-5P
    1020410-83-6P 1020410-84-7P 1020410-85-8P
    1020410-86-9P 1020410-87-0P 1020410-88-1P
    1020410-89-2P 1020410-90-5P 1020410-91-6P
    1020410-92-7P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

- (dimiracetam derivs. for treatment of neuropathic pain) 770730-81-9 HCAPLUS
- RN
- CN 1H-Pvrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihvdro-1-phenvl- (CA INDEX NAME)

RN 770730-82-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-methylphenyl)-(CA INDEX NAME)

RN 770730-85-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-methylphenyl)-(CA INDEX NAME)

RN 770730-86-4 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-(CA INDEX NAME)

RN 770730-87-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(5-fluoro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 770730-88-6 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluoro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 770730-89-7 HCAPLUS

RN 770730-90-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
1-(4-chloro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 770730-91-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-chlorophenyl)dihydro-(CA INDEX NAME)

- RN 770730-92-2 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-methoxyphenyl)-(CA INDEX NAME)

- RN 770730-93-3 HCAPLUS
- CN Benzonitrile, 3-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

- RN 770730-94-4 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-chlorophenyl)dihydro-(CA INDEX NAME)

- RN 770730-95-5 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-hydroxyphenyl)-(CA INDEX NAME)

RN 770730-96-6 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770730-97-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770730-98-8 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methoxyphenyl)-(CA INDEX NAME)

RN 770730-99-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,5-dimethylphenyl)dihydro- (CA INDEX NAME)

RN 770731-00-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,4-dimethylphenyl)dihydro- (CA INDEX NAME)



RN 770731-02-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
 dihydro-1-[3-(1-methylethyl)phenyl]- (CA INDEX NAME)

RN 770731-03-8 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
1-(4-chloro-3-methylphenyl)dihydro- (CA INDEX NAME)

RN 770731-07-2 HCAPLUS

RN 770731-08-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluoro-4-methylphenyl)dihydro- (CA INDEX NAME)

RN 770731-12-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-ethylphenyl)dihydro-(CA INDEX NAME)

RN 770731-13-0 HCAPLUS

RN 770731-14-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(hydroxymethyl)phenyl]- (CA INDEX NAME)

- RN 770731-15-2 HCAPLUS
- CN Benzoic acid, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-y1)- (CA INDEX NAME)

- RN 770731-16-3 HCAPLUS
- CN Benzoic acid, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)-, ethyl ester (CA INDEX NAME)

- RN 770731-17-4 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

- RN 770731-18-5 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-fluorophenyl)dihydro-(CA INDEX NAME)

- RN 770731-19-6 HCAPLUS
- CN Benzonitrile, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

RN 770731-23-2 HCAPLUS

CN Benzonitrile, 2-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

RN 770731-24-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluorophenyl)dihydro-(CA INDEX NAME)

RN 1020410-82-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,5-difluorophenyl)dihydro- (CA INDEX NAME)

RN 1020410-83-6 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(2-fluoro-5-methylphenyl)dihydro- (CA INDEX NAME)

RN 1020410-84-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-chloro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 1020410-85-8 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-fluoro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 1020410-86-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
1-(4-fluoro-3-methylphenyl)dihydro- (CA INDEX NAME)

RN 1020410-87-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-methylphenyl)-, (7aS)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1020410-88-1 HCAPLUS

Absolute stereochemistry.

RN 1020410-89-2 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-, (7aS)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1020410-90-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-, (7aR)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1020410-91-6 HCAPLUS

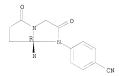
CN Benzonitrile, 4-[(7aS)-hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1020410-92-7 HCAPLUS

CN Benzonitrile, 4-[(7aR)-hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl]-(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817893 HCAPLUS

DOCUMENT NUMBER: 141:332191

TITLE: Preparation of new bicyclic arylimidazolones with nootropic action

INVENTOR(S): Farina, Carlo; Gagliardi, Stefania; Parini, Carlo;

Martinelli, Marisa; Ghelardini, Carla Nikem Research S.r.l., Italy

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:					KIND DATE				APPLICATION NO.						DATE			
WO WO					A2			20041007		WO 2004-EP50339					20040322			
	W:	CN, GE, LK, NO,	CO, GH, LR, NZ,	CR, GM, LS, OM,	CU, HR, LT, PG,	CZ, HU, LU, PH,	DE, ID, LV, PL,	DK, IL, MA, PT,	DM, IN, MD, RO,	DZ IS MG RU	, BG, , EC, , JP, , MK, , SC,	EE, KE, MN, SD,	EG, KG, MW, SE,	ES, KP, MX, SG,	FI, KR, MZ, SK,	GB, KZ, NA, SL,	GD, LC, NI, SY,	
	RW:	BW, BY, ES, SK,	GH, KG, FI, TR,	GM, KZ, FR,	KE, MD, GB,	LS, RU, GR,	MW, TJ, HU,	MZ, TM, IE,	SD, AT, IT,	SL BE LU	, UZ, , SZ, , BG, , MC, , GN,	TZ, CH, NL,	UG, CY, PL,	ZM, CZ, PT,	ZW, DE, RO,	AM, DK, SE,	AZ, EE, SI,	
CA EP	TD, TG 2004224087 2520008 1608655				A1 20041007 A1 20041007 A2 20051228			AU 2004-224087 CA 2004-2520008 EP 2004-741432						20040322 20040322 20040322				
EP	1608 R:	AT,	BE,	CH,	DE,	DK,	2008 ES, BO.	0716 FR, MK.	GB,	GR AL	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
CN JP NZ	CN 1756757 JP 2006523198 NZ 543154				A T A	A 20060307 BR 2004-8601 A 20060405 CN 2004-80005591 T 20061012 JP 2006-505479 A 20080328 NZ 2004-543154 T 20080815 AT 2004-741432							20040322 20040322 20040322 20040322					
MX NO	MX 2005PA09903 NO 2005004898					T 20080815 AT 2004-74 A 20061110 MX 2005-PA A 20051024 NO 2005-48 A 20070525 IN 2005-CN				PA99 4898	03		2	0050	915 024			
IN US RIORIT	2005 2007 Y APP	UN02 0027 LN.	/57 137 INFO	.:	A A1		2007	0525		US IT	2005- 2006- 2003- 2004-	5504 MI57	83 3		2 A 2	0051 0060 0030 0040	616 324	
THER SO	DURCE	(S):			CASI	REAC	T 14	1:33										

AB The title compds. [I; A = aryl, heteroaryl, arylalkyl; R1 = H, arylalkyl,

ΙT

RN

```
heterocyclylalkyl, etc.; R2 = H, alkyl, arylakyl, Ph; or R1 and R2, taken
together, form a saturated carbocyclic ring; R3 = H, alkyl, aryl, arylalkyl,
heterocycly1; n = 2-4; R4 = H, alky1, ary1, etc.] having nootropic action
(i.e., protecting and stimulating cerebral functions), analgesic action
and antihyperalgesic action, and therefore useful for the treatment of
cognitive deficits, and of various types of pain, were prepared Thus,
reacting tetrahydro-pyrrolo[1,2-a]imidazole-2,5-dione with iodobenzene
afforded 1-phenyl-tetrahydro-1H-pyrrolo[1,2-a]imidazole-2,5-dione which
was evaluated in a rat model of mononeuropathy (data given). The
pharmaceutical compns. comprising the compound I are claimed.
770730-81-9P, 1-Phenyl-tetrahydro-1H-pyrrolo[1,2-a]imidazole-2,5-
dione 770730-82-0P 770730-83-1P 770730-84-2P
770730-85-3P 770730-86-4P 770730-87-5P
770730-88-6P 770730-89-7P 770730-90-0P
770730-91-1P 770730-92-2P 770730-93-3P
770730-94-4P 770730-95-5P 770730-96-6P
770730-97-7P 770730-98-8P 770730-99-9P
770731-00-5P 770731-01-6P 770731-02-7P
770731-03-8P 770731-04-9P 770731-05-0P
770731-06-1P 770731-07-2P 770731-08-3P
770731-09-4P 770731-10-7P 770731-11-8P
770731-12-9P 770731-13-0P 770731-14-1P
770731-15-2P 770731-16-3P 770731-17-4P
770731-18-5P 770731-19-6P 770731-20-9P
770731-21-0P 770731-22-1P 770731-23-2P
770731-24-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
```

NAME)

RN 770730-82-0 HCAPLUS

770730-81-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-methylphenyl)-(CA INDEX NAME)

(preparation of pyrroloimidazolones with nootropic action)

1H-Pvrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihvdro-1-phenvl- (CA INDEX

RN 770730-83-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]lmidazole-2,5(3H,6H)-dione, 1-(2,6-dimethylphenyl)dihydro- (CA INDEX NAME)

RN 770730-84-2 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-thienyl)- (CA INDEX NAME)

RN 770730-85-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-methylphenyl)-(CA INDEX NAME)

RN 770730-86-4 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methylphenyl)-(CA INDEX NAME)

RN 770730-87-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(5-fluoro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 770730-88-6 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluoro-2-methylphenyl)dihydro- (CA INDEX NAME)

RN 770730-89-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770730-90-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-chloro-2-methylphenyl)dihydro- (CA INDEX NAME)

- RN 770730-91-1 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-chlorophenyl)dihydro-(CA INDEX NAME)

- RN 770730-92-2 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-methoxyphenyl)-(CA INDEX NAME)

- RN 770730-93-3 HCAPLUS
- CN Benzonitrile, 3-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

- RN 770730-94-4 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-chlorophenyl)dihydro-(CA INDEX NAME)

RN 770730-95-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-hydroxyphenyl)-(CA INDEX NAME)

RN 770730-96-6 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
dihydro-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770730-97-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770730-98-8 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(4-methoxyphenyl)-(CA INDEX NAME)

- RN 770730-99-9 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,5-dimethylphenyl)dihydro- (CA INDEX NAME)

- RN 770731-00-5 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,4-dimethylphenyl)dihydro- (CA INDEX NAME)

- RN 770731-01-6 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-naphthaleny1)-(CA INDEX NAME)

- RN 770731-02-7 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
 dihydro-1-[3-(1-methylethyl)phenyl]- (CA INDEX NAME)

- RN 770731-03-8 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-chloro-3-methylphenyl)dihydro- (CA INDEX NAME)

RN 770731-04-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-phenyl-3-(phenylmethyl)- (CA INDEX NAME)

RN 770731-05-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-3-methyl-1-phenyl-(CA INDEX NAME)

RN 770731-06-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-3-(2-methylpropyl)-1-phenyl- (CA INDEX NAME)

RN 770731-07-2 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
1-(3-fluoro-5-methylphenyl)dihydro- (CA INDEX NAME)

RN 770731-08-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluoro-4-methylphenyl)dihydro- (CA INDEX NAME)

RN 770731-09-4 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-7a-methyl-1-phenyl-(CA INDEX NAME)

RN 770731-10-7 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-phenyl-, (7aS)-(CA INDEX NAME)

Absolute stereochemistry.

RN 770731-11-8 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-phenyl-, (7aR)-(CA INDEX NAME)

Absolute stereochemistry.

RN 770731-12-9 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-ethylphenyl)dihydro-(CA INDEX NAME)

RN 770731-13-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)

RN 770731-14-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-[4-(hydroxymethyl)phenyl]- (CA INDEX NAME)

RN 770731-15-2 HCAPLUS

CN Benzoic acid, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

- RN 770731-16-3 HCAPLUS
- CN Benzoic acid, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-y1)-, ethyl ester (CA INDEX NAME)

- RN 770731-17-4 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione,
 dihydro-1-[4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

- RN 770731-18-5 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(4-fluorophenyl)dihydro-(CA INDEX NAME)

$$\bigcap_{N} \bigcap_{N} F$$

- RN 770731-19-6 HCAPLUS
- CN Benzonitrile, 4-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

- RN 770731-20-9 HCAPLUS
- CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-pyridinyl)- (CA INDEX NAME)

RN 770731-21-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(3-pyridinyl)- (CA INDEX NAME)

RN 770731-22-1 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(5-methyl-2-pyridinyl)- (CA INDEX NAME)

RN 770731-23-2 HCAPLUS

CN Benzonitrile, 2-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

RN 770731-24-3 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3-fluorophenyl)dihydro-(CA INDEX NAME)



=> FIL REGISTRY
COST IN U.S. DOLLARS
FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 16:14:51 ON 15 OCT 2008 USE IS SUBJECT TO THE TERMS OF YOUR SIN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 OCT 2008 HIGHEST RN 1061458-09-0 DICTIONARY FILE UPDATES: 14 OCT 2008 HIGHEST RN 1061458-09-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> Uploading C:\Program Files\Stnexp\Oueries\10550483a.str





SINCE FILE

SINCE FILE

ENTRY

24.42

ENTRY

-2.40

TOTAL.

SESSION

202.99

TOTAL

-2.40

SESSION

```
chain nodes:
10 11
ring nodes:
1 2 3 4 5 6 7
chain bonds:
1-10 6-11
ring bonds:
1-2 1-5 2-3 3-4 3-6 4-5 4-7 6-7
exact/norm bonds:
1-5 1-10 2-3 3-4 3-6 4-5 4-7 6-7 6-11
exact bonds:
1-2
isolated ring systems:
containing 1:
```

G1:Ph,Cy,Hy

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 10:CLASS 11:CLASS

L5 STRUCTURE UPLOADED

=> d 15 L5 HAS NO ANSWERS L5 STR



G1 Ph,Cy,Hy

Structure attributes must be viewed using STN Express query preparation.

=> s 15 SAMPLE SEARCH INITIATED 16:15:08 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 96 TO ITERATE

100.0% PROCESSED 96 ITERATIONS 5 ANSWERS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1333 TO 2507
PROJECTED ANSWERS: 5 TO 234

5 SEA SSS SAM L5 1.6

=> s 15 sss full

FULL SEARCH INITIATED 16:15:15 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1712 TO ITERATE

100.0% PROCESSED 1712 ITERATIONS 104 ANSWERS

SEARCH TIME: 00.00.01

104 SEA SSS FUL L5

=> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 178.36 381.35 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -2.40

FILE 'HCAPLUS' ENTERED AT 16:15:19 ON 15 OCT 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 15 Oct 2008 VOL 149 ISS 16 FILE LAST UPDATED: 14 Oct 2008 (20081014/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16 L8

5 L6

=> s 18 and pv<=2003 24009785 PY<=2003

3 L8 AND PY<=2003

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:413910 HCAPLUS

DOCUMENT NUMBER: 148:462516

TITLE: Synthesis and biological evaluation of novel dimiracetam derivatives useful for the treatment of

neuropathic pain

AUTHOR(S): Farina, Carlo; Gagliardi, Stefania; Ghelardini, Carla; Martinelli, Marisa; Norcini, Monica; Parini, Carlo;

Petrillo, Paola; Ronzoni, Silvano

CORPORATE SOURCE: Brane Discovery, Gerenzano, Varese, 21040, Italy SOURCE: Bioorganic & Medicinal Chemistry (2008), 16(6),

3224-3232 CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:462516

Ι

- AB Chemical modifications of dimiracetam (1), a bicyclic analog of the nootropic drug piracetam, afforded a small set of novel derive, that were investigated in in vivo models of neuropathic pain. Compds. 5, 7 and 8 displayed a very promising antihyperalgesic profile in rat models of neuropathic pain induced by both chronic constriction injury of the sciatic nerve and streptozotocin. The compds. completely reverted the reduction of pain threshold evaluated by the paw pressure test. Importantly these derive. did not induce any behavioral impairment as evaluated by the rotarod test. These results suggest that compds. 5, 7 and 8 might represent novel and well-tolerated therapeutic agents for the relief of neuropathic pain.
- IT 770730-82-0P 770730-93-3P 770731-00-5P 1020410-82-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dimiracetam derivs. for treatment of neuropathic pain)

RN 770730-82-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-methylphenyl)-(CA INDEX NAME)

RN 770730-93-3 HCAPLUS

CN Benzonitrile, 3-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

RN 770731-00-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,4-dimethylphenyl)dihydro- (CA INDEX NAME)

RN 1020410-82-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,5-difluorophenyl)dihydro- (CA INDEX NAME)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817893 HCAPLUS

DOCUMENT NUMBER: 141:332191

TITLE: Preparation of new bicyclic arylimidazolones with

nootropic action

INVENTOR(S): Farina, Carlo; Gagliardi, Stefania; Parini, Carlo;

Martinelli, Marisa; Ghelardini, Carla Nikem Research S.r.l., Italy

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.							DATE			
	2004085438 2004085438			A2				WO 2004-EP50339						20040322					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3, BO	, BR	, BW,	BY,	BZ,	CA,	CH,		
													EG.						
		GE,	GH,	GM,	HR.	HU,	ID,	IL,	IN,	IS	, JE	, KE	, KG,	KP,	KR.	KZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, ME	, MN	, MW,	MX,	MZ,	NA,	NI,		
													, SE,						
		TJ.	TM.	TN.	TR.	TT.	TZ.	UA.	UG.	US	. U2	. vc	, VN,	YU.	ZA.	ZM.	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SI	, S2	, TZ	, UG,	ZM,	ZW,	AM,	AZ,		
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE	, BO	, CH	, CY,	CZ,	DE,	DK,	EE,		
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU	J, MO	, NL	, PL,	PT,	RO,	SE,	SI,		
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA.	, G1	ī, GQ	, GW,	ML,	MR,	NE,	SN,		
		TD,	TG																
AU	2004	2240	87		A1 20041007				AU 2004-224087										
									CA 2004-2520008										
EP	1608655				A2 20051228				EP 2004-741432						2	0040	322		
EP	1608	1608655				B1 20080716													
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, II	, LI	, LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL	, TE	R, BG	, CZ,	EE,	HU,	PL,	SK		
BR	2004	0086	01		A 20060307					BR	2004	-860	1		20040322				
CN	1756	757			A	BR 2004-8601 CN 2004-80005591 JP 2006-505479 NZ 2004-543154 AT 2004-741432						20040322							
JP	2006	5231	98		T	JP 2006-505479						20040322							
NZ	5431	54			A		2008	0328	NZ 2004-543154						20040322				
AT	4013	27			T		2008	0815		ΑT	2004	-741	432		2	0040	322		
MX	2005	PA09	903		A		2006	1110		MX	2005	-PA9	903		2	0050	915		
NO 2005004898					A		2005	1024	AT 2004-741432 MX 2005-PA9903 NO 2005-4898						20051024				
IN 2005CN02757					A		2007	0525		IN	2005	-CN2	757		2	0051	024		
US 20070027137					A1		2007	0201											
ORITY APPLN. INFO.:				. :						ΙT	2003	-MI5	73		A 2				
										WO	2004	-EP5	0339		W 2	0040	322		
ER S	DURCE	(S):			CASI	REAC	T 14	1:33	2191	; M	IARP/	T 14	1:332	191					

AB The title compds. [I; A = aryl, heteroaryl, arylalkyl; R1 = H, arylalkyl,

heterocyclylalkyl, etc.; R2 = H, alkyl, arylakyl, Ph; or R1 and R2, taken together, form a saturated carbocyclic ring; R3 = H, alkyl, aryl, arylalkyl, heterocyclyl; n = 2-4; R4 = H, alkyl, aryl, etc.] having nootropic action (i.e., protecting and stimulating cerebral functions), analgesic action and antihyperalgesic action, and therefore useful for the treatment of cognitive deficits, and of various types of pain, were prepared Thus, reacting tetrahydro-pyrrolo[1,2-a|imidazole-2,5-dione with iodobenzene afforded 1-phenyl-tetrahydro-lH-pyrrolo[1,2-a|imidazole-2,5-dione which was evaluated in a rat model of mononeuropathy (data given). The pharmaceutical compns. comprising the compound I are claimed. 770730-82-0P 770730-93-3P 770731-00-5P

IT 770730-82-0P 770730-93-3P 770731-00-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrroloimidazolones with nootropic action) RN 770730-82-0 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, dihydro-1-(2-methylphenyl)-(CA INDEX NAME)

RN 770730-93-3 HCAPLUS

CN Benzonitrile, 3-(hexahydro-2,5-dioxo-1H-pyrrolo[1,2-a]imidazol-1-yl)- (CA INDEX NAME)

RN 770731-00-5 HCAPLUS

CN 1H-Pyrrolo[1,2-a]imidazole-2,5(3H,6H)-dione, 1-(3,4-dimethylphenyl)dihydro- (CA INDEX NAME)

L8 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:253481 HCAPLUS

DOCUMENT NUMBER: 120:253481

ORIGINAL REFERENCE NO.: 120:44722h,44723a

TITLE: Chiral high-performance liquid chromatography of some

related bicyclic lactams

AUTHOR(S): Camilleri, Patrick; Eggleston, Drake; Farina, Carlo;
Murphy, Jose A.; Pfeiffer, Ugo; Pinza, Mario; Senior,

Lesley A.

CORPORATE SOURCE: SmithKline Beecham, The Frythe, Welwyn Hertfordshire,

AL6 9AR, UK

SOURCE: Journal of Chromatography (1993), 654(2), 207-13

CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chromatog. methods utilizing a Chiralcel OC cellulose-based column were developed for the chiral resolution of optical isomers of the cognition-enhancing ISF 4185 and related bicyclic lactams. These methods were scaled up for the preparation of purified samples of enantiomers, one pair

of which was submitted to x-ray anal. The resolution of the enantiomers derived from these compds. appears to be mainly dependent on their ability to hydrogen bond to the chiral stationary phase.

126101-10-8

RL: PROC (Process)

(resolution of, by chiral HPLC)

RN 126101-10-8 HCAPLUS

CN Imidazo[1,2-a]pyridine-2,5(1H,3H)-dione, tetrahydro- (CA INDEX NAME)

L8 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:191621 HCAPLUS

DOCUMENT NUMBER: 120:191621 ORIGINAL REFERENCE NO.: 120:33919a,33922a

TITLE: Synthesis and pharmacological activity of a series of

dihydro-1H-pyrrolo[1,2-a]imidazole-2,5(3H,6H)-diones, a novel class of potent cognition enhancers

AUTHOR(S): Pinza, Mario; Farina, Carlo; Cerri, Alberto; Pfeiffer,

Ugo; Riccaboni, Maria T.; Banfi, Silvano; Biagetti, Raffaella; Pozzi, Ottorino; Magnani, Maurizio; Dorigotti, Luciano

CORPORATE SOURCE: Res. Lab., SmithKline Beecham Farmaceutici S.p.A.,

Baranzate, 20021, Italy

SOURCE: Journal of Medicinal Chemistry (1993), 36(26), 4214-20

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 120:191621

CT

A series of dihydro-1H-pyrrolo[1,2-a]imidazole-2,5(3H,6H)-diones, e.g. dimiracetam (I), were synthesized. These bicyclic derivs. contain both the 2-pyrrolidinone and 4-imidazolidinone nuclei, already recognized as important for cognition enhancing activity. In addition, these structures maintain the backbone of piracetam and oxiracetam with the acetamide side chain restricted in a folded conformation. Their ability to reverse scopolamine-induced amnesia was assessed in a one trial, step-through, passive avoidance paradigm. The main features observed are a potent antiamnestic activity after i.p. administration (minimal ED being between 0.3 and 1 mg/kg i.p. for most compds.), the presence of a bell-shaped dose-response curve and, generally, a reduction of biol, activity after po administration. However, the unsubstituted compound I shows no evidence of a bell-shaped dose-response curve and completely retains activity when given orally, being 10-30 times more potent than the reference drug oxiracetam.

126101-10-8P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and cognition enhancer-activity of)

RN 126101-10-8 HCAPLUS

CN Imidazo[1,2-a]pyridine-2,5(1H,3H)-dione, tetrahydro- (CA INDEX NAME)

L8 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:158246 HCAPLUS DOCUMENT NUMBER: 112:158246

ORIGINAL REFERENCE NO.: 112:26755a,26758a

TITLE: Condensed imidazole derivatives useful as nootropic agents, a process and intermediates for their

preparation, and pharmaceutical compositions containing them

Pinza, Mario; Riccaboni, Maria Teresa; Cerri, Alberto;

INVENTOR(S): Farina, Carlo

I.S.F. S.p.A., Italy

Eur. Pat. Appl., 22 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE

EP	335483		A2	1989100	14 EP	1989-3011	23	19890206
EP	335483		A3	199112:	. 8			
				ES, FR, GI	B, GR, I	r, LI, LU,	NL, SE	
FI	8900438 8900541		A	1989080	9 FI	1989-438		19890130
BR	8900541		A	1989100	3 BR	1989-541		19890203
CN	1036204 283393		A	1989103		1989-1017		
DD	283393		A5	1990103	.0 DD	1989-3255	51	19890206
					.8 DD	1989-3379	16	19890206
US	5053422		A	1991100	1 US	1989-3070	12	19890206
ZA	8900894		A	1991103	30 ZA	1989-894		19890206
CA	1324378		C	199311:	.6 CA	1989-5902	13	19890206
DK	8900550		A	1989080	9 DK	1989-550		19890207
NO	8900515		A	1989080	9 NO	1989-3379 1989-3070 1989-894 1989-5902 1989-550 1989-515		19890207
NO	168424		В	199111:	. 1			
NO	291996 5053422 8900894 1324378 8900550 8900515 168424 168424		C	199202				
AU	0323032		n.	130300.		1989-2969	2	19890207
AU	616240		B2	199110:				
	53363			199010		1989-574		19890207
	203104							
	204794				28 HU	1990-4864		19890207
	1799383				28 SU	1989-4613	489	19890207
	01246281		A			1989-2957		
	105963		B1	1993013	80 RO	1989-1457	63	19890208
	105964		B1	1993013	80 RO	1989-1457	64	19890208
	105965		B1	1993013	80 RO	1989-1457	65	19890208
	104070		B1	199307	20 RO	1989-1381 1991-6698 1991-1566 1991-7947 1992-8628	46	19890208
	5130319		A A	199207	.4 US	1991-6698	06	19910315
	9101566		A	1989080	19 NO	1991-1566		19910419
	9179479		A	199109.	.2 AU	1991-7947	9	19910701
	5200406		A	1993040	06 US	1992-8628	55	19920403
PRIORITY	Y APPLN. 1	INFO.:			1.1	1988-1933	6 А	19880208
						1989-3070		
						1989-515		
						1991-6698	06 A3	19910315
OTHER SC	DURCE(S):		MARI	PAT 112:15	3246			

GI



AB Eighteen title compds. I (R1 = H, C1-4 alkyl, CHR4CONHR5, CHR4CO2R5; R2 = H, C1-5 alkyl, amino acid side chain; R3 = H, C1-4 alkyl, CONH2, CO2R6; R4-R6 = H, C1-4 alkyl; n = 2-4) were prepared as nootropics. For example, cyclocondensation of PhCH2NHCH2CONH2 with OCH(CH2)2CO2Et gave 75% Et 1-benzyl-4-oxo-2-imidazolidinepropanoate, which underwent hydrogenolysis of the benzyl group and cyclization over ion exchangers to give 67% I (R1 = R2 = R3 = H; n = 2) (II). In a passive avoidance test in rats, II and 2addnl. I were approx. 30-fold as potent as oxiracetam in reversing scopolamine-induced amnesia.

126101-10-8P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as nootropic agent)

RN 126101-10-8 HCAPLUS

CN Imidazo[1,2-a]pyridine-2,5(1H,3H)-dione, tetrahydro- (CA INDEX NAME)

=> log y COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 35.32 416.67 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -4.00 -6.40

STN INTERNATIONAL LOGOFF AT 16:17:01 ON 15 OCT 2008